

REMARKS

In accordance with the foregoing, claims 15-28 are pending and under consideration. The Office Action Summary does not reflect the status of the claims correctly and completely. Claims 1-14 are cancelled, not withdrawn as indicated therein. Therefore, only claims 15-28 are pending and under consideration. The Office Action Summary gives no indication regarding whether claim 28 is allowed or rejected (although based on the content of the Office Action, Applicants believe that claim 28 is rejected). Appropriate corrections are respectfully requested.

REJECTIONS UNDER 35 U.S.C. §103

Claims 15, 16, 18-20 and 26-28 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,052,593 to Guimont et al. (hereinafter "Guimont") in view of U.S. Publication No. 2004/001429 A1 to Ma et al. ("Ma").

In the Amendment filed on August 9, 2007, applicants argued that independent claim 15 is not rendered obvious by Guimont and Ma. In the "Response to Arguments" section on page 2 of the outstanding Office Action, the Examiner responds to Applicants' arguments by stating that:

Guimont et al. teaches allocating sub-carriers of the frequency band to radio cells for frequency reuse scheme. However, the allocation does not occur during different time periods. The allocation of sub-carriers to modes (modes relate to different time-frames) is used to overcome that limitation (allocating sub-carriers during a first time period and a second time period).

See lines 9-13 of the outstanding Office Action.

Applicants respectfully submit that in combining features disclosed in different references, the Examiner fails to consider the context of the teachings and whether the combination does in fact disclose the claimed features. See in MPEP 2141.02 "In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983).

There is no apparent difference of opinion between the Applicants and Examiner regarding what the prior art references teach. However, the rejections put forth in the

outstanding Office Action fail to meet the requirements of 37 C.F.R. 104(c)(2)¹ because they fail to show how and which one of the teachings of the prior art is asserted to render obvious the claim recitations. The logical connection between the prior art teachings and the claim recitations is missing in the alleged support for the rejections. That is, the Office Action merely repeats the disclosure of the prior art references, but does not link them to the features recited in the claims, therefore, precluding Applicants from rebutting the rejections efficiently. Applicants cannot deny that the prior art references teach what they teach, but respectfully submit that the prior art's teachings do not render obvious the claim recitations.

Thus, a combination of Guimont's and Ma's teachings would lead a person of ordinary skill in the art to a method having the following features:

- dividing the radio frequencies in the cellular frequency band according to a frequency band into frequency groups,
- grouping cells into clusters,
- assigning to each cell of a cluster a different frequency group,
- allocating frequency groups (sub-carriers) to different transmission modes during different time periods.

However this combination fails to teach

- temporarily during a first time period allocating the sub-carriers to the radio cells, **to make the sub-carriers available during a first time period to each radio cells for transmission of information;** and
- allocating the sub-carriers to the radio cells during a second time period, **the sub-carriers being allocated by assigning each of the sub-carriers only to a subset of the radio cells including at least two radio cells for transmission of the information,** (emphasis ours)

as recited in claim 15. That is, even if Guimont discloses allocating subcarriers to radio cells, it does not teach the two different manners of allocating sub-carriers to radio cells as recited in claim 15 (emphasized above). Similarly, even if Ma discloses an allocation of sub-carriers to

¹ "When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified." 37 C.F.R. 104(c)(2).

modes in different time-frames, it does not teach or suggest allocation to radio cells as recited in claim 15. The invention as recited in claim 15 is not rendered obvious by combining the teachings of Guimont and Ma.

Additionally, on page 5 of the outstanding Office Action it is asserted:

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to assign different sub-carriers to modes that are implemented at different periods as taught by Ma et al. in the method of Guimont et al., in order to efficiently create a frequency plan.

In *KSR Corp. v. Teleflex Inc.* (2007), the Supreme Court maintained that the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and that it was "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed.² "Efficiently creating a frequency plan" is the objective in Guimont and it is not related to the current application. Applicants respectfully submit that the outstanding Office Action fails to provide a viable reason for combining the references as required.

In view of the above-presented arguments, claim 15 and claims 16-26 depending directly or indirectly from claim 15 are patentable over the combination of Guimont with Ma.

Independent claim 27 patentably distinguishes over Guimont and Ma at least by reciting "at least one control device assigning the sub-carriers of the at least one frequency band to said at least two radio cells during a first time period to make all of the sub-carriers temporarily available to each radio cell for transmission of information, and that during a second time period temporarily each of the sub-carriers is available to a subset of the at least two radio cells for transmission of information."

Independent claim 28 patentably distinguishes over Guimont and Ma at least by reciting:

- means for temporarily assigning the sub-carriers of the at least one frequency band to the at least two radio cells during a first time period so that the sub-

² Often, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. KSR, slip op. at 14.

carriers are temporarily available to each radio cell for the transmission of the information, and

means for temporarily assigning the sub-carriers of the at least one frequency band among the at least two radio cells during a second time period so that each of the sub-carriers is temporarily available to a subset of the at least two radio cells for the transmission of the information.

Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Guimont in view of Ma, and in further view of U.S. Patent No. 6,917,580 B2 to Wang et al. ("Wang").

Claims 21 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Guimont in view of Ma and in further view of U.S. Publication No. 2002/0147017 to Li et al. ("Li"). Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Guimont and Ma in view of Li, and in further view of U.S. Patent No. 5,726,978 to Frodigh et al. ("Frodigh"). Claims 24 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Guimont and Ma, in view of Li and Frodigh, and further in view of U.S. Publication No. 2002/0082016 A1 to Obayashi. ("Obayashi").

Wang, Li, Frodigh and Obayashi do not correct or compensate for the above identified failure of Guimont and Ma in rendering obvious the independent claims. Therefore, all the claims depending from claim 15 (i.e. 16-26) patentably distinguish over the cited prior art at least by inheriting patentable features from the independent claim.

CONCLUSION

There being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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